

EUROPEAN PARLIAMENT

2004



2009

Session document

FINAL
A6-0160/2006

3.5.2006

REPORT

on Energy efficiency or doing more with less - Green Paper
(2005/2210(INI))

Committee on Industry, Research and Energy

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MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on Energy efficiency or doing more with less - Green Paper (2005/2210(INI))

The European Parliament,

- having regard to the Commission's Green Paper on Energy Efficiency or Doing More with Less (COM(2005)0265),
- having regard to Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings¹,
- having regard to Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market² (the so called 'Cogeneration Directive'),
- having regard to Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of eco-design requirements for energy-using products³,
- having regard to Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services⁴,
- having regard to Council Directive 92/75/EEC of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances⁵,
- having regard to the Commission's proposal for a Decision of the European Parliament and of the Council concerning the seventh framework programme of the European Community for research, technological development and demonstration activities (2007 to 2013) (COM(2005)0119),
- having regard to its resolution of 14 March 2001 on the Commission communication to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions - Action Plan to Improve Energy Efficiency in the European Community⁶,
- having regard to its resolution of 6 July 2000 on the Commission's second report to the Council and the European Parliament on the state of liberalisation of the energy markets⁷,
- having regard to Rule 45 of its Rules of Procedure,

¹ OJ L 1, 4.1.2003 p. 65.

² OJ L 52, 21.2.2004, p. 50.

³ OJ L 191, 22.7.2005, p. 29.

⁴ OJ L 114, 27.4.2006, p. 64

⁵ OJ L 297, 13.10.1992, p. 16.

⁶ OJ C 343, 5.12.2001, p. 190.

⁷ OJ C 121, 24.4.2001, p. 451.

- having regard to the report of the Committee on Industry, Research and Energy and the opinions of the Committee on Economic and Monetary Affairs , the Committee on the Environment, Public Health and Food Safety and the Committee on Transport and Tourism (A6-0160/2006),
- A. whereas energy efficiency is the relationship between energy supplied and energy used,
- B. whereas energy consumption has been historically linked with economic growth, and improvements in energy efficiency bring about a decoupling of the positive correlation between energy consumption and economic output, thus improving the energy intensity of the economy,
- C. whereas energy conservation can arise from improvements in energy efficiency,
- D. whereas energy efficiency is the largest, fastest and cheapest response to the challenges of energy security, rising and volatile energy prices and environmental concerns,
- E. whereas energy consumption has risen yearly in the EU at a rate of 1% on average and energy intensity has decreased by a third in the last 35 years, but recently this rate has fallen sharply,
- F. whereas the Commission has evaluated that the EU could save 20% of its current energy uses in a cost-effective manner on the basis of studies that have not taken into consideration the high energy prices that we are experiencing nowadays, and will continue to experience in the future,
- G. whereas reductions in energy intensity do not entail a reduction in GDP growth,
- H. whereas energy efficiency makes an important contribution to increasing the EU's competitiveness and employment and to achieving the Lisbon goals,
- I. whereas estimated gross energy consumption in buildings amounts to 27%, in transport to 20% and in industry to 18% of total consumption,
- J. whereas energy saving and efficiency also apply to other areas and activities (for example farming or public urban amenities and their use),
- K. whereas any measure or policy relating to energy efficiency must allow for the entire life cycle of the product or infrastructure concerned,
- L. whereas final energy use in the EU of 25 Member States in 2004 was 28% in the industrial sector, 31% in transport and 41% in buildings,
- M. whereas electrical transmission and distribution losses amount to between 10% and 12% on average, depending on the distance between the supplier and the consumer, while heat transmission and distribution losses are more variable and depend not only on distance but also on the method of insulation,
- N. whereas an EU-wide harmonised and un-bureaucratic benchmarking system can be a useful tool to measure energy efficiency gains,

- O. whereas there are several legislative texts in force relating to energy efficiency which are already effective, and another one which must be transposed within the year, and the Member States' first national energy efficiency action plans must be in place by 1 June 2007,
- P. whereas some Member States are still to transpose and fully implement several directives,
- Q. whereas the correct transposition and full implementation of existing directives would contribute significantly to improving energy efficiency, thus reducing the energy intensity of our economy in a cost-effective manner,
- R. whereas, furthermore, the calculation of cost-effectiveness must include the costs of inaction and the expected economic benefits from early action and innovation as well as from technological learning, which will drive down mitigation costs,
- S. whereas there is no framework directive for energy efficiency in transport,
- T. whereas the new agreement on the financial perspective has considerably reduced the budget for R&D,
- U. whereas energy efficient appliances and technologies such as lamps, movement sensitive light switches, heat-pumps, intelligent metering systems managed by remote control and gas top-boxes, as well as energy services, are available to consumers, yet market penetration of such goods and services is not significant, even though the Lisbon strategy lays great emphasis on support for business start-ups in the field of clean technologies, viewed as a new potential source of employment,
- V. whereas existing energy efficiency legislation has not been thoroughly implemented in all Member States, for example some goods and appliances currently on the market do not conform to EU labelling standards,
- W. whereas an ambitious energy efficiency policy must be in place in order to close the gap between technical possibilities and their use in practice,
- X. whereas industry's responsibilities to contribute to energy efficiency improvements as well as curbing CO₂ emissions must be seen against the background of supporting manufacturing at high efficiency and emission standards and the development of innovative technologies,
- Y. whereas many consumers feel they lack the necessary information on efficient energy consumption and on the real cost of energy but would be willing to change their habits accordingly, if different tariff options were offered and if they were properly informed by means of a comprehensive labelling system detailing the energy efficiency of appliances and vehicles,
- Z. whereas the EU is supposed to become the most sustainable and energy-efficient economy in the world by 2020,
- AA. whereas European, national, local and regional levels and all involved stakeholders as

well as independent experts need to cooperate closely on energy efficiency,

AB. whereas biomass in general can contribute 15% of the energy needs in the EU by conventional combustion; whereas further progress will be possible by pyrolysis processing that allows the hydrogen content to be freed as molecular hydrogen and represents the most direct and convenient method of hydrogen production, and this will be able to feed either higher efficiency electricity production by combined cycles or fuel cells with a further increase of efficiency and flexibility; whereas this biomass use will be an additional income for the agriculture and forestry sector and therefore a basis for a reconsideration of the Common Agricultural Policy,

1. Urges Member States to fully implement European directives in the field of energy efficiency, notably those on the energy performance of buildings, promotion of cogeneration, liberalisation of the energy markets, and energy end-use efficiency and energy services;
2. Asks the Commission to ensure that Member States fully implement all existing EU legislation in the field of energy; suggests to speed up the infringement procedures for the institutions to gain credibility in the enforcement of European law;
3. Recalls that if Member States were to fully implement existing EU legislation, 50% of the EU target to save 20% of energy by 2020 would already be met;
4. Calls on the Commission to provide clear and accessible information on the state of implementation of the EU energy directives, and asks the Commission to produce monthly updates to be published on the Commission's Directorate-General for Energy and Transport website;
5. Asks the Commission to analyse the interplay of different pieces of legislation (e.g. directives on Emissions Trading, Large Combustion Plant, Integrated Pollution Prevention and Control, combined heat and power (CHP), etc) in promoting energy efficiency and its impact on the sectors covered;
6. Asks the Commission, where it can act on the basis of existing directives under the comitology procedure, to do so immediately; points out in this respect the obligation of the Commission within the framework of Directive 2005/32/EC to adopt so-called implementing measures by May 2007 for the groups of products which offer a high potential for cost-effective reduction of greenhouse gas emissions;
7. Urges that the Commission pursue a convincing enforcement policy in order to avert the danger that important energy efficiency directives may be insufficiently complied with;
8. Awaits with interest the Commission's Energy Efficiency Action Plan and will be particularly vigilant in ensuring that it is consistent with previous legislation;
9. Calls on the Commission to set a reduction target based on the potential energy savings as evaluated in the Green Paper but taking into account the recent increase in energy prices;
10. Calls on the Commission to set out differing energy efficiency scenarios in the European

Energy Efficiency Action Plan with a particular view to ascertaining the implications for energy use, the energy mix and CO₂ reduction;

11. Draws attention to the fact that the oil price on which the energy savings target of 20% in the Green Paper is based is now significantly higher, which results in a substantial increase in the cost-effectiveness of energy efficiency measures; calls therefore on the Commission to raise the savings target accordingly;
12. Calls on the Commission to propose, in the Energy Efficiency Action Plan, practical measures to be taken at both European and national level;
13. Calls on the Commission to submit a coherent strategy for safeguarding energy supplies, increasing energy efficiency and promoting renewable energies; considers that the various fields of policy should complement one another with regard to this subject and that, given the numerous initiatives, rules and projects which exist at EU level, it is in many cases impossible for consumers to recognise their respective goals;
14. Considers that increased investment in renewable sources of energy and energy saving technologies are crucial as they are key tools to decrease energy demand, fight climate change and ensure energy supply, and that the EU could also benefit greatly by exporting these technologies to countries whose expected exponential increase in energy consumption will force them to invest considerable amounts in environmental technologies; therefore calls for the Seventh Research Framework Programme (2007-2013) to guarantee substantial funds in favour of these technologies;
15. Calls on the Commission, in close agreement with the Member States and the European Parliament and taking full account of the scientific and economic facts, to set an ambitious but realistic target of at least 20% improvement in energy efficiency by 2020 and consider setting individual targets for different sectors, taking into consideration national circumstances and the past achievements of Member States and their ability to adapt to imminent legislation or legislation in force and still to be implemented;
16. Stresses that the target of 9% in nine years stipulated in Directive 2006/32/EC can only be a minimum target; stresses also that the savings target in every country, despite divergent trends, is well above one percentage point a year; sees the necessity of requiring greater energy savings if, as expected, energy use continues to rise;
17. Would like the Commission to assess the effects of the proposals it has put forward for discussion on disadvantaged members of society; notes that certain tax proposals, in particular, are likely to place a disproportionate burden on such people;
18. Stresses the need for Member States to adopt National Energy Efficiency Action Plans based on ambitious and realistic mandatory annual targets; calls on the Member States to provide adequate funding for the implementing agencies and programmes at national and local level;
19. Suggests that the Commission conduct an impact assessment of the administrative costs of introducing a system to control energy efficiency gains; believes that the cost-benefit principle should be applied to each legislative initiative regarding energy efficiency and

with regard being had to the economic costs of global warming and of energy insecurity, given that energy efficiency is important in cutting CO₂ emissions and improving security of supply;

20. Points out that any assessment of the cost-benefit ratio of energy efficiency measures should also take into account such factors as rising energy prices, reduced dependence on energy imports, climate and environmental protection, security of supply in the field of energy and innovation, as well as mid and long-term savings effects;
21. Recommends that the Commission systematically evaluate the expected benefits and classify the proposed measures in order of preference, giving priority to those areas and initiatives where major results will be immediately forthcoming, providing a positive example to the Member States and their citizens; accordingly takes the view that this should also be reflected in national programmes of action;
22. Considers that local energy and environment agencies must also be supported financially by the establishment of an energy efficiency fund primarily aimed at projects and programmes dispersed throughout the country; considers that it is necessary, moreover, to encourage and publicise the role of professional facilitators, experts who have extensive knowledge of energy matters and the relevant technology and many contacts in the various sectors concerned, and can act as intermediaries between the public administrative authorities and investors in the sector;
23. Considers that local and regional level involvement should be considered when the cohesion and structural funds are configured and that, by the same token, particular account should be taken of local and regional level participation in the EU's support programmes, particularly when the 'Intelligent Energy - Europe' programme is incorporated in the Competitiveness and Innovation Framework Programme (CIP);
24. Calls on the Commission to review energy efficiency measures in order to ascertain their acceptance by consumers and to concentrate its efforts only on those measures which can be manifestly successful as quickly as possible;
25. Calls for all the measures to be implemented from the point of view of their impact on the small and medium-sized enterprises (SMEs) and their competitiveness; stresses the important role that SMEs play in implementing energy efficiency opportunities within industry; realises that SMEs might struggle to implement the energy efficiency measures required by European legislation; calls on the Commission to pay particular attention to this issue and provide, as far as is technically possible and economically viable, assistance in this matter not only in the form of Community aid but also by providing targeted advice and networking to help SMEs to gain access to information and exchange ideas on the best available technologies and best practice;
26. Notes the need to support efforts to improve energy efficiency using public funds; considers that public funding should only be permitted where it is essential, particularly in the initial phase of actions, following which it should be withdrawn and replaced by market mechanisms;
27. Realises that Member States may have difficulty in providing the financing to implement

a number of cost-effective energy efficiency measures due to the upfront costs of such measures, in particular within the housing sector; calls on the Commission therefore to ensure that adequate structural funding is made available under the European Regional Development Fund (ERDF) for housing and as a minimum to ensure that Member States can use up to 10% of total ERDF funds for energy efficiency improvements in housing;

28. Remains of the view that completing the liberalisation of energy markets is essential to enhancing competitiveness, tackling energy prices and enhancing security of supply and energy efficiency, and therefore calls on the Commission to follow up and promote more intensively the implementation of the liberalisation process in the Member States ,but supports the establishment of a better balanced framework regarding the promotion of investments to improve innovation and competition; notes that in such a framework, Member States' and the EU's regulatory capabilities must be improved;
29. Believes economic incentives and funding instruments to be of decisive importance in encouraging fresh investment in new energy products and services; believes that the purpose of financial incentives should therefore be established precisely and clearly, bearing in mind, among other things, the competitiveness of European products and services;
30. Calls on the Commission to foster a legislative environment that fully supports and encourages the full potential of high-efficiency cogeneration installations, in particular for industrial uses as well as micro-cogeneration for SMEs, and asks Member States to implement the Cogeneration Directive in a way that reflects a realistic and economically feasible approach and avoids establishing barriers to this type of investment; Furthermore, calls on the Member States to take full advantage of, and extend, the application of existing technology – including trigeneration – which exploits the energy currently wasted within industry and energy production;
31. Considers that fiscal measures can be effective as an incentive as well as a deterrent and should be used as one tool to favour energy efficiency and to speed up the introduction of energy efficient solutions; stresses, that the tax system also should incorporate the 'polluter pays' principle;
32. Considers that taxation plays a prominent role in enhancing energy efficiency; believes that efforts should be made to ensure that Member States' national tax systems discriminate in favour of energy efficient practices;
33. Considers that multilateral banks and public financial institutions should create an Energy Efficiency Fund granting money for energy efficiency projects; takes the view that energy efficiency objectives should also be integrated into other sectoral policies, especially fiscal policy, transport and cohesion policy; believes that innovative financing schemes and contractual tools, such as micro-credit and joint ventures between private companies and municipalities, must be proposed in order to involve actively local partners and decision-makers;
34. Considers, on the basis of positive experiences with household appliances, that it is necessary to examine the possibilities of extending energy efficiency labelling, or other consumer information solutions, to other products as well;

35. Calls on the Commission and the Member States to encourage local authorities to take innovative steps to ensure efficient use of energy resources, including by stepping up the production of energy from alternative sources using tax relief and increased financial support from the EU;
36. Considers that there should be incentives for improving infrastructure and interconnections, in order to reduce transmission and distribution losses; believes that generation points should be rationally distributed within national territories as close as possible to where electricity is consumed; notes that renewable energy sources are particularly suited to decentralised generation;
37. Notes that electricity transmission and distribution are responsible for the loss of up to 10% of the electricity produced; draws attention to the fact that in some Member States these losses account for more than 20% of the electricity produced; calls on the Member States to take urgent action to minimise the losses in electricity transmission and distribution networks;
38. Stresses the importance of focusing on the demand side by encouraging more direct involvement in mitigation efforts at the level of the European citizen, a necessary prerequisite being the provision of detailed information about the carbon content of products and services;
39. Urges the Member States to implement the Cogeneration Directive in full to realise the vast potential energy savings from cogeneration and calls for a European cogeneration initiative for complementing the Directive in order to ensure clear and visible results in the coming years; the promotion of cogeneration should be mainstreamed into all related EU policy fields, such as the environment, research, education, competition, industry, trade, and regional policy;
40. Urges the Member States to speedily implement Directive 2002/91/EC; asks the Commission to rapidly evaluate its impact on energy consumption as well as on the economy and, in the case of positive results, to consider the possibility of gradually extending the scope of the Directive to fully cover all buildings, in particular to ensure that all existing residential buildings smaller than 1000 m² are also covered by an obligation to bring energy efficiency standards of components (e.g. roof insulation, windows) up to current new build standards when the component is undergoing renovation, taking as a basis similar initiatives already in place in Member States;
41. Urges the Commission, when Directive 2002/91/EC is next revised, to do more to encourage the use of passive or natural sources of lighting, cooling, and heating, and to propose that the scope of the Directive be extended to cover urban amenities and spaces other than buildings in the strict sense;
42. Stresses the considerable importance of national energy efficiency action plans and the need to make them widely known to the general public so that society, non-governmental organisations, industry and politicians can also play an influential role in drawing up and monitoring them;
43. Calls for a European buildings initiative which coordinates upgrading energy performance

standards for new buildings and creates incentives to speed up the renovation of the existing building stock; considers that particular attention should be given to passive heating and cooling; considers also that in order to maximise economic efficiency, the initiative must also co-ordinate the efforts of architects, property developers, owners, local politicians and must include training for building managers;

44. Stresses the need to broaden the scope of Directive 2002/91/EC to include significant renovations of buildings of all sizes and to provide adequate financing to accelerate the renovation of building blocks with the highest savings potential; where applicable, these projects should be combined with the renovation of the district heating systems supplying these buildings while noting that, below a critical population threshold, district heating is not viable;
45. Believes that the refurbishment and modernisation of district heating systems, as well as co-generation, should be strongly supported by means of clear targets and incentives;
46. Urges that the buildings of the European institutions should comply with the highest standards in the field of energy efficiency so that these buildings become centres of innovation;
47. Believes that the Member States should play an exemplary role in applying compulsory energy efficiency measures in the public sector, inter alia by buying efficient vehicles when renewing public transport fleets and applying efficiency standards when carrying out major renovations in buildings including, for example, energy efficiency criteria in public works contracts; in this respect, welcomes the introduction of National Energy Efficiency Action Plans;
48. Considers that the Action Plan should, as far as possible, create framework, cost-effective, coherent and market-compatible conditions, subject to impact assessment; considers also that the Action Plan should moreover be consistent with the role of each player in the energy market structure;
49. Welcomes public-private partnerships because they can deliver significant results; notes that by having the common objective of improving energy efficiency in the EU, the combined effect of joining forces between the public and private sectors is greater than the sum of individual efforts (for example in information campaigns and dissemination of best practices);
50. Notes that the creation of a free market in energy services involving energy companies and all other independent operators such as Energy Service Companies (ESCOs), independent energy advisors and equipment installers, could lead to a significant reduction in consumption in the household and industrial sectors, and in the meantime may represent an opportunity for the energy sector to balance the losses of the fall in energy sales;
51. Calls on the Commission to promote the creation of a free energy services market with the same treatment and transparency for all operators that could lead the energy companies to develop the alternative business of energy efficiency and to induce them to contribute greatly to consumption reductions;

52. Calls on the European institutions to set a positive example by limiting greenhouse gas (GHG) emissions in their various activities, through enhanced energy efficiency in office buildings and for all equipment used, low carbon travel etc; believes that special efforts should be made in relation to the travel of Members of the European Parliament, implying a reconsideration of the multiple locations of the European Parliament, low-carbon vehicles for the drivers' service etc;
53. Stresses the need to promote the creation of clearinghouse facilities, ESCOs and energy efficiency service companies to facilitate the realisation of energy efficiency projects;
54. Calls on the Commission and the Member States to include a high level of energy efficiency among public procurement selection criteria;
55. Points out that energy service companies, through energy savings performance contracts, can provide the services required for building renovations relating to energy efficiency improvements without the need for initial investment by the contractor;
56. Considers that in the context of the revision of the Community guidelines on State aid for environmental protection, steps should be take to further encourage investment in energy efficiency measures;
57. Points out that EU regional policy funds could also be used to finance inter-regional projects providing know-how transfer to the Member States and regions lacking advanced technology development for energy efficiency;
58. Supports measures to achieve the wider application of energy efficient technology solutions that are already available; calls for initiatives to reinforce instruments for financing energy efficiency and investing in material efficiency;
59. Reminds Member States that, together with the Commission and its initiatives on 'energy education', the provision of information to citizens is mainly a national, regional and local responsibility and calls for an increased effort in facilitating the provision of information to citizens and the private sector; considers that this information should include information on the availability of existing and cost-effective technology and on the increasing scarcity of resources; calls on the Commission to support, together with relevant national, local and regional institutions, an EU wide information and awareness raising campaign on best practice in energy efficiency and to support networks of excellence;
60. Reiterates the importance of Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community¹ (the so-called 'EU Emissions Trading Scheme (ETS) Directive') for driving energy efficiency improvements in industry, reducing CO₂ emissions and meeting the EU's current and post 2012 Kyoto obligations; calls for the inclusion of the aviation sector in the EU ETS;
61. Calls on Member States, regions and local authorities to cut the bureaucracy that hinders

¹ OJ L 275, 25.10.2003, p. 32.

the application by citizens and the private sector of public incentives to use energy in a more efficient way;

62. Calls on the Member States and regional and local authorities to set up energy efficiency communication and kick-start projects respectively for citizens and SMEs within the next regulation proposal for cohesion policy and social and regional development (Structural Funds) and the CIP;
63. Considers that public awareness of energy efficiency should also be raised through clear and adequate information made available in energy supply contracts; considers that adequate regulation is needed;
64. Notes that communal waste contains a large quantity of chemical energy, which could be economically used if environmental protection conditions were also improved;
65. Stresses that there are considerable energy reserves in coal as well as technological possibilities for the efficient and clean burning of coal and its conversion into gas and diesel fuels;
66. Draws Member States' attention to the need to modernise old heating and generation facilities;
67. Believes that, as the EU covers different time zones, crossborder electricity networks will facilitate energy supply during peak consumption periods and considerably reduce losses resulting from the need to maintain standby production capacity;
68. Calls on Member States and regions where there are large industrial conurbations to assess the potential for cogeneration and the amount of waste energy in these areas;
69. Calls on the Commission to disseminate more information about trends in energy markets, thereby cultivating awareness of the problem among consumers;
70. Calls on the Commission to make full use of the experience gained from SAVE and Energy Intelligent Europe projects among Member States and to multiply its efforts by disseminating and sharing best practices;
71. Welcomes the Commission's CARS21 initiative and believes that an integrated approach to transport is necessary; considers however, that this approach should not imply a reduction in the obligations on any stakeholder; stresses the importance and necessity of a framework directive for energy efficiency in transport; calls on the Commission and Member States to bring forward national sustainable transport initiatives, which focus on city mobility, train infrastructure, energy-efficient cars and modal shift; considers that the EU should evaluate current and if appropriate propose new efficiency standards for cars after assessing the voluntary agreements with the automobile industry;
72. Believes that energy assessment of the functioning of cities, where urban transport is concerned, in particular interconnections, should be made a priority and properly addressed in the criteria for Structural Fund support;

73. Notes that advanced new aircraft already consume significantly less fuel, but nevertheless urges that research in this field be speeded up.
74. Recalls that roughly 59% of the oil consumed in Europe in 2004 was used by the transport sector, with the remaining 17% used in buildings, 16% in non-energy uses and 8% in industry; notes that the Commission expects energy demand in the transport sector to grow by at least 30% until 2030, with an increase of up to 5% per year for air transport, which will increase emissions and dependency on imported energy;
75. As far as the transport sector is concerned, calls for a comprehensive strategy to phase out fossil fuel use in, and to minimise CO₂ emissions from, the transport sector, including greatly increased production and use of the latest technology biofuels in accordance with the Commission's biofuels strategy and much higher fiscal incentives for low-emission vehicles, as already proposed by the Commission in its proposal for a Council Directive on passenger car related taxes (COM(2005)0261);
76. Considers it also urgent that the Commission submit proposals for sustained, long-term improvement in energy efficiency and conservation in the transport sector, including legislative proposals to achieve: (a) twice as fuel-efficient cars and vans, (b) a transfer of traffic from road and air to rail and water, and (c) more public transport;
77. Considers the growth of transport - notably road transport - to be one of the main obstacles to curbing Europe's energy demand; calls on the Commission to examine the progress made under the voluntary agreement with European car manufacturers and, if necessary, consider additional measures to reach the targets set;
78. Considers that captive fleets, particularly in big cities, offer a good potential for promoting new and more efficient solutions for urban mobility; calls on Member States to use public procurement and tax relief for the promotion of more efficient means of transport, thus contributing to build up the markets for cleaner and more efficient vehicles and fuels;
79. Calls on Member States to promote market transformation programmes that accelerate the spread of best efficient technologies available such as CHP and cutting-edge technologies, such as energy efficient "A+/A++" class appliances, in the market and asks the Commission to consider introducing the 'top runner' approach in Europe;
80. Supports the harmonisation of standards in the internal market via the introduction of labelling schemes and benchmarks, but stresses the need, in the context of international trade negotiations, to transpose these standards to the international level;
81. Asks the Commission to review and revise on a regular basis instruments such as labelling and energy efficiency standards so that they reflect technological developments;
82. Stresses the importance of a European market transformation for appliances, office equipment, consumer electronics and industrial engines to increase energy efficiency; believes that this could be realized through the introduction of more stringent minimum standard requirements, progressive public procurement programmes, targeted information campaigns and improved energy labelling;

83. Takes the view that the system of tradable 'white certificates' should not be followed up at present, as it will be necessary to wait for the results of emissions trading, and the emissions trading system must first be optimised to take account of experience to date;
84. Calls on the Commission to examine energy saving possibilities in the agricultural sector and incorporate them within its initiatives in this area;
85. Calls on the Commission and Member States to promote the spread of products and technologies which ensure that energy using goods and appliances only use energy when it is actually needed, (for example movement sensitive lighting and appliances without a standby mode);
86. Calls on Member States to ensure that their market surveillance systems are stringent and effective so that appliances, that do not conform with the EU's existing labelling schemes do not enter the EU market;
87. Calls for the early introduction of an 'energy consumption per kilometre' label for the transport sector so that consumers can choose, for example, between rail, air and car travel in the light of an understanding of the energy implications;
88. Considers furthermore that the EU car labelling system needs to be reinforced by measures to promote the market penetration of low CO₂ emission and/or biohydrogen-fuelled vehicles, as well as wider measures such as much greater enforcement of speed limits, improving road and traffic management systems and infrastructure as well as supporting improved driving skills;
89. Stresses that the effects of the white certificate system should be ascertained precisely before its possible introduction; notes that there are also other ways of achieving the same savings;
90. Considers that high levels of spending on research and development at national and EU level are necessary to enable the potential for energy efficiency to be exploited and criticises, in that respect, the decision of the Heads of State and Government on the financial perspective for 2007-2013 and the reduction in the seventh research framework programme it implies; considers it is essential that the EU lead by example by treating research expenditure within the Seventh Research Framework Programme in the field of energy efficiency as a priority, taking into account the considerable potential for energy efficiency gains, reductions in emissions and a global market for new and efficient equipment and systems, and refraining from cutting the Seventh Research Framework Programme budget in the energy efficiency sector, and calls for Member States, industry and the Seventh Research Framework Programme to achieve successful demonstrations in all these areas; considers that the CIP must play an important role in the promotion and marketing of new technologies;
91. Stresses that the relevant European financial instruments such as the Structural Funds, Cohesion Fund, research and development programmes and the CIP should accord substantially greater priority to investment in energy conservation and energy efficiency; calls on the international financing institutions such as the European Investment Bank, European Bank for Reconstruction and Development, World Bank and also public banks

at a national level to include energy audit procedures in all their activities, to have dedicated and specialised energy conservation departments and to initiate special credit schemes for their investments, for example for the accelerated renovation of buildings or of public transport infrastructure and to streamline the access to risk capital for energy efficiency investments as well as to introduce standardised risk assessments for energy efficiency investment in order to reduce administrative burdens;

92. Calls for the extension of the Cohesion Fund to cover areas such as energy efficiency and measures to promote clean urban communications and public transport systems, which will be of particular value to the new Member States where the greatest margins for energy savings exist;
93. Calls on the Commission to adopt a horizontal approach when drawing up future policies or legislative proposals so as to ensure that energy efficiency criteria are invariably taken into account; also considers that energy efficiency should be treated as a favourable ground in Community grant award procedures;
94. Considers it to be as important to translate the results of research and development into concrete products as it is to bring them onto the market, with regard in particular to the action taken to integrate energy efficiency into research and development; believes that the measures for the dissemination of new technologies must be supported also in the Seventh Research Framework Programme;
95. Recognises that the Commission's own resources in the field of energy efficiency do not match either its ambition in this field or the urgency to act; calls on the Commission's President to ensure that increased resources are made available to ensure that the Commission's ambition in this area is matched by its own resources;
96. Calls on Member States and the Commission to enhance international cooperation in the energy efficiency field to ensure that new regulations and standards do not fragment the global market;
97. Calls on the Commission to incorporate issues of energy efficiency in its relations with third countries;
98. Believes that promoting energy efficiency at the global level will be at least as important as dialogue with energy producing countries; believes that energy efficiency must be integrated in EU foreign policy, not least its development cooperation as well as within the framework of dialogues with energy producing countries and with counterparts in emerging economies (including China, India and Brazil), in Eastern European, Balkan and Mediterranean countries, and African, Caribbean and Pacific countries;
99. Points out that at present some 188 million household appliances in Europe are over ten years old and around 50% of the energy they require could be saved by replacing them; calls on the Commission and the Member States, therefore, to speed up the replacement of appliances by means of appropriate, economically oriented measures such as tax incentives for manufacturers or campaigns to give purchasers discounts;

100. Calls on the Commission to initiate studies on the impact of all relevant EU policies on energy demand;
101. Calls on the Commission to explore the potential for intelligent use of information and communication technologies to enhance energy and material efficiency, through dematerialisation, intelligent buildings, transport substitution etc. and to provide the necessary policy frameworks to encourage such developments;
102. Calls on the Commission to explore the opportunities provided by the internal electricity market to use energy more efficiently, making the most of the comparative advantage in selected countries for efficient as well as low carbon power production and considering at the same time whether the system of national emission reduction quotas makes sense in a situation with increased trans-border trade;
103. Instructs its President to forward this resolution to the Council and Commission.

EXPLANATORY STATEMENT

I. INTRODUCTION

The European Commission adopted on 22 June 2005 the *Green Paper on Energy Efficiency or Doing More with Less*. The rapporteur welcomes this document, which enhances the debate on energy efficiency, undoubtedly one of the main current issues when dealing with energy policy in the European Union.

We have to take into account that different estimates foresees that energy consumption will increase by at least 10% in the European Union over the next 15 years. With a continuous increase of energy prices, the concerns on future energy supply as well as the need of reducing greenhouse emissions, it is time to reach an adequate level of energy efficiency to cope with future challenges.

Achieving a good level of energy efficiency would bring positive effects such as the improvement of the European economy competitiveness, the reduction of greenhouse emissions and guaranteeing security of energy supply.

As stated in the Green Paper, there are already a big number of energy efficiency measures in force in the European Union, whilst others are being drawn up at the present time. We have to remember that the European Parliament has participated in the legislative process of important Directives such as the one on buildings, combined heat and power, eco-design, emissions trading and on the energy end-use efficiency (which has recently been subject of an agreement in 2nd reading between Council and Parliament).

Because most of these Directives are still to be applied, it is too soon now to evaluate their real impact on energy efficiency. The rapporteur therefore believes that, before kicking off new legislative procedures on energy efficiency, it is necessary to verify what progress has been done as a result of the legislation which has already been adopted.

II. CONTENTS OF THE GREEN PAPER

The rapporteur is of the opinion that, when speaking on energy efficiency, it is necessary to delimit appropriately the scope. The Green Paper of the Commission is very wide, proposing a high number of measures to act at European, national and regional level, touching many aspects that, in some cases, do not have a direct relation with energy efficiency.

In its introduction, the Commission lists some reasons to have a programme promoting energy efficiency measures, including competitiveness and the Lisbon Agenda, environmental protection and the EU's Kyoto obligations as well as the security of supply. The intention is to allow this document to "act as a catalyst, leading to a renewed energy efficiency initiative at all levels of European society -EU, national, regional and local." In order to stimulate the debate, the Green Paper puts forward 25 questions to have a wide-ranging public consultation. Furthermore, the Commission has decided to set up the "European Sustainable Energy Forum", based on the models of the "Florence" and "Madrid" Forums.

The document is mainly divided into 2 parts: the first one dealing with the obstacles to improving efficiency, and a second one proposing a European Initiative. According to the Commission, only a combination of measures at various levels (EU, Member States, regions, local level, industry) will allow the whole potential to be developed. This statement is true and should be extended to a combination of measures addressing not only energy efficiency, but as well security of supply and controlling greenhouse emissions.

Finally, the rapporteur agrees with the Commission when it states that "the EU could save at least 20% of its present energy consumption in a cost-effective manner, equivalent to €60 billion per year, or the present combined energy consumption of Germany and Finland". For this reason, in the following section, he puts for your consideration some suggestions on areas where improvements could be achieved.

III. SPECIFIC ISSUES

Energy Efficiency, Energy Savings and Economic Efficiency

Energy efficiency is the relation between energy output and input. It is therefore a relative measure which is often confused with the term "energy saving". Energy savings imply a reduction of energy in absolute terms, independently of economic growth. This would be technically impossible to achieve under current conditions (see Annex I).

Energy consumption has been historically linked with economic growth, to the point that it is a statistical indicator of the latter. Improvements in energy efficiency bring a decrease in the positive correlation between energy consumption and economic output (i.e. a GDP growth of 5% does not necessarily entail an equivalent growth in energy consumption).

Furthermore, energy efficiency is not always accompanied by economic efficiency. Indeed, sometimes increasing energy efficiency might not be economically wise because energy efficiency measures should be cost-effective. It is therefore essential to find the level where energy and economic efficiency levels are maximised (see Annex II).

Buildings

The potential in efficiency in the building sector, as it has been shown in recent studies such as the ECOFYS one endorsed by the Commission, is very important and must be taken into consideration. The ECOFYS study illustrates clearly the impact on efficiency and subsequent savings if Directive 2002/91/EC were to be revised and the threshold of 1000m² were reduced in order to include newly built residential buildings. Short and medium term financial and employment benefits are at hand in a cost-efficient manner.

Regarding the renovation of existing infrastructures, the rapporteur welcomes the highlight of Energy Saving Contracts (ESCOs) in the Green Paper. This type of contracting consists of an agreement with an energy service company which will carry out necessary improvements in an existing building in order to guarantee a percentage of savings in the energy bill. The contract will be paid out with the money saved from the reduced consumption. After that, the

customer will enjoy a reduced energy bill. This comes to show that there are solutions that require no additional funding. Additionally, other measures could be taken in smaller scale renovations such the installation of the so-called "smart meters" that allow consumers to have real-time figures of their real consumption or gas boilers "top boxes" that can lead to a reduction in emissions and costs of producing hot water of up to 40%.

Transport

The rapporteur welcomes the CARS21 initiative by the Commission which aims to improve legislation, competitiveness, respect of the environment and road safety in the transport sector. The integrated approach to the transport efficiency issues used in the report is essential to fully appreciate the areas where most improvements can be achieved in a cost-effective manner. The rapporteur believes that specific measures should be taken at each level: fuel production, vehicles manufacturing and driving habits.

Moreover, the rapporteur thinks it would be interesting to have a clear market picture to understand why some efficient and cleaner technologies are being successfully marketed abroad while there is little market penetration within the EU.

Research and development

The rapporteur hopes that the negotiations on the Financial Perspectives (2007-2013) will culminate in a substantial increase in European funds for Research and Development without which the EU will continue to lag behind in comparison with the USA and Japan in areas such long term clean transport prospects, including the use of hydrogen fuel cells. While understanding the physical limitations to large scale marketing of such vehicles (lack of infrastructures, cost-effectiveness, etc.) it is hard to understand why by 2010 Canada is likely to have finished its own "hydrogen highway" between Vancouver and Whistler and the European Union has not a similar project in sight. Furthermore, the State of California has launched "Vision 2010" that has the main objective of giving access to every citizen in California access to hydrogen fuel along the state highways. This project will include the construction of 150 to 200 hydrogen stations spaced out a maximum of every 30 kilometres. These initiatives are a clear example of successful public-private partnership as well as the materialisation of truly ambitious commitments.

R&D in cleaner fuels is also important, especially in the short term. Second generation bio-fuels will be available soon and efforts should be made to quickly develop the necessary technological adjustments that would allow them to be used.

Further research should be done in the viability of trigeneration that provides cooling, heating and power. If this technology proved to be efficient, it could be a possible solution to for those countries that have extreme climate conditions and for which cogeneration covers only part of the problem.

Carbon capture should remain a priority in research as its application and results are only foreseen to happen in the next 20 or 30 years.

Appliances

Another sector in which targeted improvements could be achieved is the electric appliances (such as refrigerators, ovens, etc.) sector. The Commission's suggestion to tackle the problem of energy consumption during "stand-by" mode could be one of these improvements. However, the rapporteur notes that this sector is already a world leader because of the efforts and investments realised in efficiency improvements. There is still a long way to go mostly in consumers' behaviour in the sense that they would rather hold on to appliances that do not meet today's standards than invest in new efficient ones. An effort could therefore be made in making the purchase of "A" class appliances (those consuming less energy) more attractive to consumers through, for example, tax credits at a Member State level or by reducing VAT at EU level.

Cogeneration

The rapporteur welcomes initiatives such as the EU Cogeneration Directive (2004/8/EC) which promotes high-efficiency cogeneration in industrial, district-heating and individual-building applications. Cogeneration is a powerful technology to convert fuels in the most efficient way into electricity and useful heat, helping to meet energy demand with reduced primary energy consumption and less CO₂ emissions in Europe, when compared to traditional methods of producing electricity and thermal heat / steam separately.

It is very important that the proper promotion of cogeneration is reflected in the way that the Directive develops and moves towards implementation in February 2006. The rapporteur believes that the EU Commission should foster a regulatory environment that supports and encourages the full potential of industrial cogeneration installations. To this end, it is vital that the efficiency reference values, which define the criteria for high-efficiency qualification, reflect a realistic and economically feasible approach and avoids establishing barriers for this type of investment.

Production and distribution losses

According to the Commission paper, losses during generation and distribution of electricity are a big part of the problem. Indeed, electricity is generated in power plants whose production is delivered to the main consumption centres through transport lines in which losses are significant. The rapporteur believes that this problem could partly be avoided if electricity was produced closer to the main consumption points, whenever it is possible.

Public Sector

The Public Sector should fulfil an exemplary role in energy efficiency. It not only has the means but the responsibility towards European citizens. This exemplary role could be expressed through the mandatory inclusion of energy efficiency criteria for public purchasing and the use of Energy Savings Contracting for buildings. Regarding transport, the public sector should attempt to renew the existing public fleets for more efficient and cleaner vehicles, taking into account that when a high number of vehicles is purchased, the priced paid will be significantly reduced. Efforts could also be made in using more efficient light bulbs in street illumination.

Public authorities have also the responsibility to ensure that information is passed on to citizens to allow them to consume energy more efficiently, emphasising the positive impact for them as individuals and for society as a whole. The rapporteur believes that the European Union should also fulfil this role but acknowledges that national and local authorities have a better understanding of their demographics and behavioural trends.

Citizens' responsibility

Regarding this last point, the rapporteur realises that regardless of already existing and future efforts in legislation, final consumers still have a big role to play if we are to achieve the full potential of these measures. He welcomes the Commission's proposal to make a specific effort in this field through enhanced education, public awareness campaigns and increased information availability not only for the sectors dealing with energy but for citizens as well, considering they can save considerable amounts of energy by changing their consumption habits.

International trade opportunities

The global energy situation presents us with both a challenge and an opportunity. A challenge because we have to double our efforts in order to become world leaders in energy efficient technologies and this, in turn, represents an enormous potential in terms of trade with third countries such as China and India, whose energy consumption is increasing exponentially and that sooner than later will require this technology massively. Exports of technology and best practices will be both crucial towards curbing CO2 emission and reducing energy intensity globally while boosting our competitiveness and economy.

The rapporteur, however, wishes to point out that at the present moment there still exist many non-tariff barriers to trade, including legal uncertainty with respect to intellectual property rights, and efforts have to be made to ensure level playing field for European companies abroad.

IV. PRESENT AND FUTURE INITIATIVES

As stated before, the rapporteur believes that the Commission should give priority to ensuring that current legislation on energy efficiency is properly enforced in Member States. It should also make an impact assessment of these measures taking into account their cost-effectiveness. These Directives, that followed the Commission Energy Efficiency Action Plan of 2000, are on:

- Energy Performance in Buildings;
- The Promotion of Cogeneration;
- The Taxation of Energy Products and Electricity;
- Energy Efficiency Requirement for Ballasts for Fluorescent Lightning;
- Labelling of Electronic Ovens, of Air-conditioners and of Refrigerators;
- Eco-design Requirement for Energy-using Products;
- Energy End-Use Efficiency and Energy Services.

The rapporteur welcomes the future development of an harmonised EU system of benchmarks and energy efficiency indicators that will allow to measure the progress realised in Member States and hopes that the Committee procedure will start as soon as possible.

The rapporteur welcomes the proposal of the Commission for Member States to develop Energy Efficiency Actions Plans, he wishes to point out however that energy efficiency measures take time to enforce and to see their true impact. He therefore suggests that these plans should be done in reasonable intervals.

Regarding future initiatives, a Directive on energy efficiency in Transport would be welcomed by Parliament. The Commission's *Action Plan on Energy Efficiency*, expected by May 2006, should include specific future proposals to be developed.

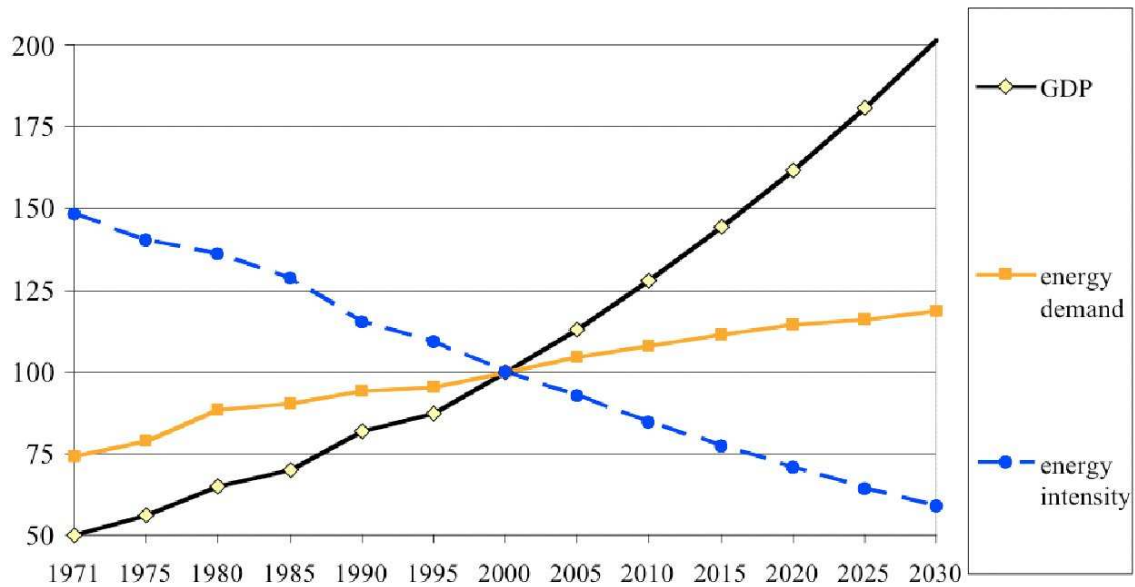
The rapporteur believes that revision of the *Guidelines on State Aid for environmental protection* provide an unique opportunity to improve the possibilities of funding energy efficiency measures. Moreover, he welcomes the initiative of certain Member State of introducing financial support for the purchase of clean vehicles.

The planned *Green Paper on a Secure, Competitive and Sustainable Energy Policy for Europe* foreseen in the Commission's Legislative Programme for 2006 will provide an unique opportunity to reflect on the EU's global energy strategy. The rapporteur thinks that this consideration should be done in combination with the intermediate review of the *White Paper on the European Transport Strategy*.

Finally, the rapporteur wishes to stress again the importance of targeting specific areas where greater improvements can be made in a cost effective manner. It would be therefore convenient, if the Commission's future proposals avoid doubling existing legislation and strengthen coordination between initiatives.

Annex I: Long-term development of GDP, energy demand and energy intensity in the EU-25

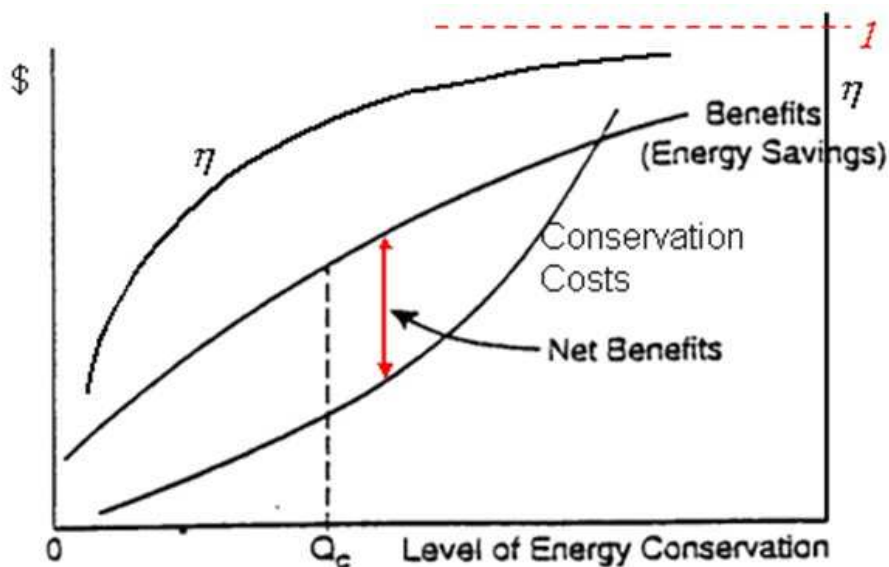
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Source: AIE and Green Paper on Energy Efficiency

Annex II: Maximization of energy and economic efficiency

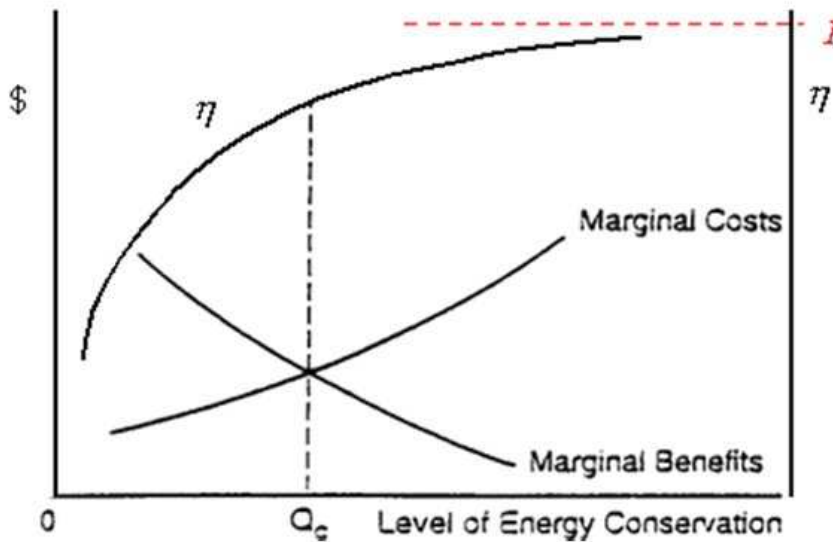
1. Maximization of net benefits



- Q is the **physical quantity** giving rise to energy conservation (e.g. the thickness of an insulating layer).

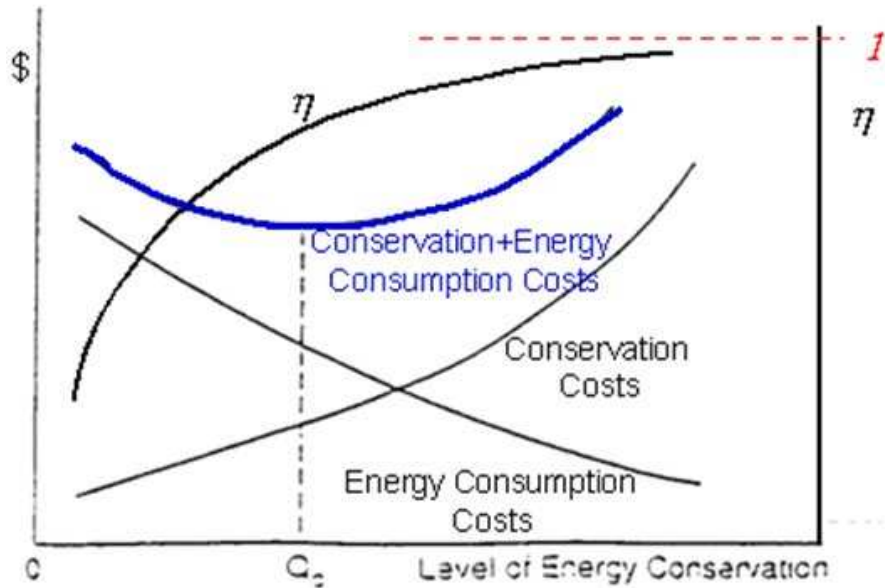
- As Q increases, Energy Efficiency increases, approaching $\eta=1$, and Energy Savings in the total life of the device/appliance increases as well following a similar path.
- Conservation Costs tend to increase more sharply as Q increases.
- Q_c is the value of Q that maximizes Net Benefits, i.e. the level that is most profitable over the long run. At Q_c the two curves are most distant.

2. Marginal analysis



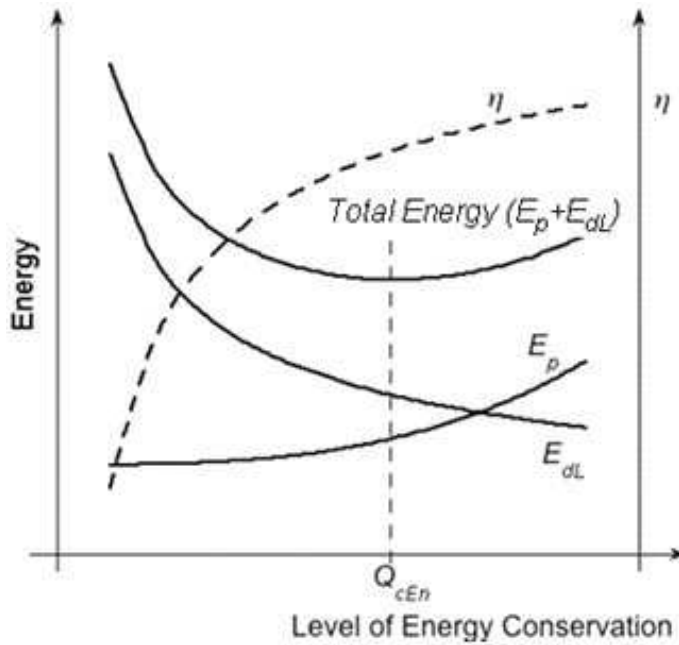
- Marginal Analysis can also be used to find the value Q_c yielding to the maximum Net Benefits.
- Marginal Costs and Marginal Benefits are the derivatives of Conservation Costs and Benefits, respectively.
- The point of intersection of the marginal curves gives the most profitable level of energy conservation Q_c .
- To the left of the point of intersection, the additional benefits from increasing the level of conservation are greater than the additional costs, thus it pays to invest more. To the right, the additional costs exceed additional benefits.

3. Life-cycle cost



- The most economically efficient -i.e. most profitable- level of energy conservation, Q_c is that for which the Total Cost curve (**Life-cycle Costs**) is at a minimum. T
- The **same value Q_c** can be found by means of one out of the three approaches just described.

4. Energetic Analysis



The efficiency η of a device/appliance can be re-written as follows:

$$\eta = \frac{E_{out}}{E_{in}} = 1 - \frac{E_d}{E_{in}}$$

where E_d is the Energy dissipated in the conversion process.

- E_{dL} is the Life-cycle dissipated Energy;
- E_p is the production Energy, i.e. Energy used for the production of the device/appliance (including all industrial processes).
- As Q increases, E_{dL} decreases but E_p in general increases.
- As a result, Q_{cEn} is the most energetically convenient level of energy conservation, Q , i.e. that for which the Total Energy curve is at a minimum.

19.4.2006

OPINION OF THE COMMITTEE ON ECONOMIC AND MONETARY AFFAIRS

for the Committee on Industry, Research and Energy

on Energy efficiency or doing more with less - Green Paper
(2005/2210(INI))

Draftswoman: Elisa Ferreira

SUGGESTIONS

The Committee on Economic and Monetary Affairs calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

1. Welcomes the Commission's initiative to address energy efficiency at the Community level;
2. Welcomes the Commission's Green Paper on a European Strategy for sustainable, competitive and secure energy, in particular the proposed creation of a European Energy Regulator and the focus on diversifying the energy source mix;
3. Welcomes the Commission's sector enquiries in the gas and electricity markets; notes that increased concentration in the EU internal market may aggravate existing distortions, thus requiring the improvement of Member State and EU regulatory capabilities in order to guarantee consumer rights and compliance with EU energy efficiency;
4. Recalls that roughly 59% of the oil consumed in the EU in 2004 was used by the transport sector, 17% in construction, 16% for non-energy purposes, and 8% in industry; notes that the Commission expects energy demand in the transport sector to grow by at least 30% until 2030, with an increase of up to 5% per year for air transport, which will increase emissions and dependency on imported energy;
5. Calls, therefore, on the Commission to propose a programme that will lead the EU towards becoming the most energy-efficient economy in the world by 2020, with transport definitely being a component of this energy-efficient economy;
6. Calls for energy efficiency objectives to be adequately reflected in the Financial Perspective 2007-2013; supports the introduction of energy efficiency criteria in the

forthcoming process of the EU own-resources review;

7. Calls for the consideration of energy efficiency gains and nuclear waste treatment to be considered as priority areas of research within the context of the 7th Framework Programme;
8. Calls for energy efficiency concerns to be reflected in the criteria for the selection of projects supported by the Structural and Cohesion Funds; welcomes the inclusion of energy concerns in the European Investment Bank goals, and calls for their extension in order to cover energy efficiency projects;
9. Considers that energy assessments of cities' transport systems, namely in relation to the choices of modes of transport and their interconnections, should be properly addressed in the context of the structural funds;
10. Considers that taxation plays a prominent role in enhancing energy efficiency; believes that efforts should be made to ensure that Member States' national tax systems discriminate in favour of energy efficient practices;
11. Recognises that local generation, including micro-generation, provides security through diversity of supply and efficiency by minimising grid-transmission losses, calls on the Commission to make proposals for financial incentives to make this a mainstream contribution to generation;
12. Considers that energy efficiency measures (e.g. the renovation of the existing building stock) boost the creation of new jobs;
13. Considers that State aid and public procurement can play a crucial role in promoting energy efficiency, that the promotion of energy efficiency should be given due consideration in the ongoing revision of the guidelines on State aid for the environment and innovation, and that the avoidance of competition distortion as well as the establishment of a specific *de minimis* threshold for such measures should be addressed;
14. Considers that increased investments in renewable sources of energy and energy savings technologies are crucial and that the EU could also benefit greatly by exporting these technologies to countries whose expected exponential increase in energy consumption will force them to invest considerable amounts in environmental technologies;
15. Considers it also urgent that the Commission submit proposals for sustainable improvements in energy efficiency and conservation in the transport sector,
16. Supports the harmonisation of standards in the internal market via the introduction of labelling schemes and benchmarks, but stresses the need, in the context of international trade negotiations, to transpose these standards to the international level;
17. Considers that public awareness of energy efficiency should also be raised through clear and adequate information made available in energy supply contracts;
18. Considers that energy savings and energy supply contracts should be able to include the

supply of a package in which different sources of energy are combined according to efficiency and cost-saving criteria;

19. Believes that in order to deal with the problem of global warming and climate change and decrease the EU's dependence on supplier countries, a large investment programme facilitating conversion to renewable energy sources is necessary; therefore calls on the Commission and on the Member States to devote many more resources to renewable energy and energy-saving technologies.

PROCEDURE

Title	Energy efficiency or doing more with less - Green Paper
Procedure number	2005/2210(INI)
Committee responsible	ITRE
Opinion by Date announced in plenary	ECON 17.11.2005
Enhanced cooperation – date announced in plenary	
Drafts(wo)man Date appointed	Elisa Ferreira 15.11.2006
Previous drafts(wo)man	
Discussed in committee	20.3.2006 18.4.2006
Date adopted	19.4.2006
Result of final vote	+: 17 –: 2 0: 9
Members present for the final vote	Zsolt László Becsey, Pervenche Berès, Sharon Bowles, Udo Bullmann, Ieke van den Burg, David Casa, Elisa Ferreira, José Manuel García-Margallo y Marfil, Jean-Paul Gauzès, Gunnar Hökmark, Karsten Friedrich Hoppenstedt, Sophia in 't Veld, Piia-Noora Kauppi, Wolf Klinz, Christoph Konrad, Astrid Lulling, Cristobal Montoro Romero, John Purvis, Alexander Radwan, Antolín Sánchez Presedo, Margarita Starkevičiūtė, Ivo Strejček, Sahra Wagenknecht.
Substitute(s) present for the final vote	Harald Ettl, Catherine Guy-Quint, Alain Lipietz, Vladimír Maňka, Thomas Mann, Diamanto Manolakou, Giovanni Pittella, Poul Nyrup Rasmussen.
Substitute(s) under Rule 178(2) present for the final vote	Marios Matsakis, Marie-Line Reynaud.
Comments (available in one language only)	...

23.3.2006

OPINION OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND FOOD SAFETY

for the Committee on Industry, Research and Energy

on energy efficiency or doing more with less
(2005/2210(INI))

Draftsman: Péter Olajos

SHORT JUSTIFICATION

There are several reasons why energy efficiency should be promoted in Europe. Decoupling economic growth and energy demand and achieving a reduction in the overall energy consumption is essential for Europe to reach its goals regarding sustainable development and the fight against climate change.

The recent crisis related to the distribution of Russian natural gas supplies, has put the spotlight on Europe's dependence on imported energy sources, which is projected to increase substantially in the years to come. Curbing our energy demand could be an important part of the solution to this problem. Improving energy efficiency is also likely to have a positive effect on employment in Europe and will help boost the competitiveness of European industry and is thus fully in line with the aims of the Lisbon strategy.

For the above reasons, the Draftsman welcomes the Commission Green Paper and the increase in Community efforts to improve energy efficiency.

Regarding the goals set in the Green Paper, these were determined at a time when oil prices were around 30 USD/barrel, whereas today, they are as high as 70 USD and expected to rise even further. This increase makes it seem appropriate that more ambitious targets be set than the 20% reduction of energy consumption outlined in the Commission proposal.

As a result of improved technology, appliances, vehicles and buildings are now available which use much less energy than before. A quick diffusion of these new technologies can help realise the potential for energy savings that we have today. However, we must be aware that replacing older products with new ones earlier than necessary has a series of negative environmental implications such as increased waste, more pollution as well as the consumption of raw materials during the production process. The Draftsman strongly believes that at all cost we must avoid sending a false message to the European consumers and public

procurement agents that they can best help the environment by throwing everything away prematurely.

The compulsory labelling of household appliances under Directive 92/75/EEC has proved a great success and led to significant improvements in the energy performance of these products. It is precisely this improvement which makes it necessary to systematically review the labelling categories to keep up with technological change by ensuring that the labels remain clear, giving valid information to consumers so as not to mislead them. (Today's refrigerator models, for example, are all rated above category C, but the labels still show a scale of A-G, which gives a false perception of the energy performance of a refrigerator with the rating of B.) The Draftsman believes that the effect of labelling systems could be further enhanced if labels were required to provide estimates of the actual operating costs during the life of the product in question.

Buildings are the largest users of energy in Europe and also have vast potential for increasing efficiency. Since only a small part of Europe's building stock represents the newest technological standards, it is necessary to invest in improving the energy performance of older buildings and not just establishing standards for new constructions. The Draftsman believes that priority should be given to housing estates of high rise blocks of flats where the savings potential is the highest.

District heating systems are potentially more efficient than separate production, but in most places where these exist (notably the new Member States), the facilities operate with a great loss of energy. Therefore it is also very important to promote the modernisation of these systems, preferably linked to the modernisation of the buildings they supply. The Draftsman believes this is necessary in order to avoid local imbalances between the demand and the supply of heat.

The Draftsman believes that financing the initial investment is most often the main obstacle in the way of - otherwise beneficial - energy efficiency projects. Therefore he considers it important to promote new and innovative forms of financing, through Energy Service Companies (ESCO-s) and clearinghouse facilities, the creation of which generally requires external incentives. He believes that the great financial institutions, such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (BERD) and the World Bank also have a greater role to play in financing energy efficiency investments and should be encouraged to take up this responsibility.

SUGGESTIONS

The Committee on the Environment, Public Health and Food Safety calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

1. Draws attention to the fact that the oil price on which the energy savings target of 20% in the Green Paper is based is now significantly higher, which results in a substantial increase in the cost-effectiveness of energy efficiency measures; calls therefore on the Commission to raise the savings target accordingly;
2. Calls on the Commission to submit a coherent strategy for safeguarding energy supplies, increasing energy efficiency and promoting renewable energies; considers that the various fields of policy should complement one another with regard to this subject and that, given the numerous initiatives, rules and projects which exist at EU level, it is in many cases impossible for consumers to recognise their respective goals;
3. Considers that increased investments in renewable sources of energy and energy savings technologies are crucial as they are key tools to decrease energy demand, fight climate change and ensure energy supply, and that the EU could also benefit greatly by exporting these technologies to countries whose expected exponential increase in energy consumption will force them to invest considerable amounts in environmental technologies; therefore calls for the 7th Research framework programme (2007-2013) to guarantee substantial funds in favour of these technologies;
4. Recalls that roughly 59% of the oil consumed in Europe in 2004 was used by the transport sector, with the remaining 17% used in buildings, 16% in non-energy uses and 8% in industry; notes that the Commission expects energy demand in the transport sector to grow by at least 30% until 2030, with an increase of up to 5% per year for air transport, which will increase emissions and dependency on imported energy;
5. Calls therefore on the Commission to propose a programme which will lead the EU towards becoming the most energy-efficient economy in the world by 2020, transport definitely being a component of this energy-efficient economy;
6. As far as the transport sector is concerned, calls for a comprehensive strategy to phase out fossil fuel use in, and to minimise CO₂ emissions from, the transport sector, including greatly increased production and use of the latest technology biofuels in accordance with the Commission's biofuels strategy and much higher fiscal incentives for low-emission vehicles as already proposed by the Commission in its proposal for a Council Directive on passenger car related taxes (COM(2005)0261);
7. Considers it also urgent that the Commission submit proposals for sustained, long-term improvement in energy efficiency and conservation in the transport sector, including legislative proposals to achieve: (a) twice as fuel-efficient cars and vans; (b) a transfer of traffic from road and air to rail and water; (c) more public transport;
8. Considers that, in order to reduce the environmental impact of the EU's 1725 mtoe of

energy consumption, approximately half of which is imported and some 1500 mtoe of which consists of climate damaging fossil fuel use, the EU's energy strategy should concentrate initially on the total substitution of fossil fuel use in the transport sector by 2030 and a substantial increase in the use of renewables in the electricity generating sector with a view to reducing greenhouse gas emissions by 60-80% over 1990 levels by 2050;

9. Considers the growth of transport - notably road transport - to be one of the main obstacles to curbing Europe's energy demand; calls on the Commission to examine the progress under the voluntary agreement with European car manufacturers and, if necessary, consider additional measures to reach the targets set;
10. Considers that captive fleets, particularly in big cities, offer a good potential for promoting new and more efficient solutions for urban mobility; calls on Member States to use public procurement and tax relief for the promotion of more efficient means of transport, thus contributing to build up the markets for cleaner and more efficient vehicles and fuels;
11. Believes that the promotion of intermodality will have very positive effects in terms of optimising energy consumption in the transport sector; underlines that the congestion of infrastructures can only be avoided in an effective way by developing the Trans-European Transport Networks and adopting measures to make rail and maritime transport more efficient and competitive;
12. Underlines that for energy using appliances (as well as buildings and vehicles), the aim has to be the reduction of the overall environmental impact throughout their entire life-cycle; calls on the Commission to initiate further studies, also for the building sector and for vehicles, in order to determine these life-cycle minima (including the environmentally optimal timing of replacement) and to have further studies carried out in those fields of energy saving where no reliable statements can so far be made;
13. Considers labelling an effective way to promote energy efficiency and calls on the Commission to continue in this direction by systematically reviewing and simplifying the label categories created under Directive 92/75/EEC and introducing labels by means of which consumers can recognise potential savings;
14. Calls for the early introduction of an 'energy consumption per kilometre' label for the transport sector so that consumers can choose, for example, between rail, air and car travel in the light of an understanding of the energy implications;
15. Considers furthermore that the European car labelling system needs to be reinforced by measures to promote the market penetration of low CO₂ emission and/or biohydrogen-fuelled vehicles, as well as wider measures such as much greater enforcement of speed limits, improving road and traffic management systems and infrastructure as well as supporting improved driving skills;
16. Stresses the need to broaden the scope of Directive 2002/91/EC on the energy performance of buildings to include significant renovations of buildings of all sizes and to provide adequate financing to accelerate the renovation of building blocks with the highest savings potential; where applicable, these projects should be combined with the renovation of the district heating systems supplying these buildings while noting that, below a critical

population threshold, district heating is not viable;

17. Believes that district heating systems refurbishment and modernisation as well as co-generation should be strongly supported by means of clear targets and incentives;
18. Urges that the buildings of the European institutions should comply with the highest standards in the field of energy efficiency so that these buildings become the centre of innovation;
19. Urges that the Commission pursue a convincing enforcement policy in order to avert the danger that important energy efficiency directives may be insufficiently complied with;
20. Stresses the need for Member States to adopt national energy efficiency action plans based on ambitious and realistic mandatory annual targets; calls on the Member States to provide adequate funding for the implementing agencies and programmes at national and local level;
21. Notes that electricity transmission and distribution are responsible for the loss of up 10% of the electricity produced; draws attention to the fact that in some Member States these losses account for more than 20% of the electricity produced; calls on the Member States to take urgent action to minimise the losses in electricity transmission and distribution networks;
22. Stresses the need to promote the creation of clearinghouse facilities, energy service companies (ESCOs) and energy efficiency service companies to facilitate the realisation of energy efficiency projects;
23. Calls on the Commission and the Member States to encourage major financing institutions to prioritise investments in energy efficiency and alternative energy sources and to consider energy efficiency aspects during the selection of projects to be financed; calls on the Member States and local authorities to eliminate obstacles to the financing of energy efficiency; calls for subsidy schemes to promote energy-efficient behaviour;
24. Calls on the Commission and the Member States to include a high level of energy efficiency among public procurement selection criteria;
25. Considers that multilateral banks and public financial institutions should create an Energy Efficiency Fund granting money for energy efficiency projects; believes that energy objectives should also be integrated into other sectoral policies (i.e. fiscal policy, transport and cohesion policy); believes furthermore that innovative financing schemes and contractual tools, such as micro-credits and joint ventures between private companies and municipalities, must be proposed in order to actively involve local partners and decision-makers;
26. Points out that EU regional policy funds could also be used to finance inter-regional projects providing know-how transfer to the Member States and regions lacking advanced technology development for energy efficiency;
27. Supports measures to achieve the wider application of energy efficient technology

solutions that are already available; calls for initiatives to reinforce instruments for financing energy efficiency and investing in material efficiency;

28. Calls on the Commission to review energy efficiency measures in order to ascertain their acceptance by consumers and to concentrate its efforts only on those measures which can be manifestly successful as quickly as possible;
29. Calls on the Commission to disseminate more information about trends on energy markets, thereby cultivating awareness of the problem among consumers;
30. Calls on the Commission to make full use of the experience gained from SAVE and Energy Intelligent Europe projects among Member States and to multiply its efforts by disseminating and sharing best practices;
31. Notes that energy consumption is strongly related to energy price, and considers it especially important to promote the spread of best practice to Member States where the progress towards energy efficiency is slowed down by energy price subsidies;
32. Calls on the Commission to initiate studies on the impact of all relevant EU policies on energy demand;
33. Calls on the Commission and the Member States to encourage local authorities to take innovative steps to ensure efficient use of energy resources, including by stepping up the production of energy from alternative sources using tax relief and increased financial support from the European Union;
34. Stresses that the effects of the white certificate system should be ascertained precisely before its possible introduction; notes that there are also other ways of achieving the same savings;
35. Stresses that a diverse energy production structure is important in the interests of security of supply and competition; stresses that it must be possible to consider all electricity production technologies and energy sources in order to ensure that dependence on fossil fuels does not increase further and so as to avoid jeopardising the attainment of other energy-policy objectives such as increasing the use of renewable energy;
36. Calls on the Commission to explore the potential for intelligent use of ICT (information and communication technologies) to enhance energy and material efficiency, through dematerialisation, intelligent buildings, transport substitution etc. and to provide the necessary policy frameworks to encourage such developments;
37. Calls on the Commission to explore the opportunities provided by the internal electricity market to use energy more efficiently, making the most of the comparative advantage in selected countries for efficient as well as low carbon power production and considering at the same time whether the system of national emission reduction quotas makes sense in a situation with increased trans-border trade.

PROCEDURE

Title	Energy efficiency or doing more with less
Procedure number	2005/2210(INI)
Committee responsible	ITRE
Opinion by Date announced in plenary	ENVI 17.11.2005
Enhanced cooperation – date announced in plenary	
Drafts(wo)man Date appointed	Péter Olajos 14.12.2005
Previous drafts(wo)man	
Discussed in committee	21.2.2006
Date adopted	21.3.2006
Result of final vote	+: 51 –: 0 0: 0
Members present for the final vote	Adamos Adamou, Liam Aylward, Johannes Blokland, John Bowis, Frederika Brepoels, Martin Callanan, Dorette Corbey, Chris Davies, Avril Doyle, Mojca Drčar Murko, Edite Estrela, Jillian Evans, Anne Ferreira, Matthias Groote, Françoise Grossetête, Gyula Hegyi, Mary Honeyball, Marie Anne Isler Béguin, Caroline Jackson, Eija-Riitta Korhola, Holger Krahmer, Urszula Krupa, Aldis Kuškis, Peter Liese, Linda McAvan, Roberto Musacchio, Riitta Myller, Péter Olajos, Miroslav Ouzký, Vittorio Prodi, Frédérique Ries, Guido Sacconi, Karin Scheele, Carl Schlyter, Horst Schnellhardt, Richard Seeber, Jonas Sjöstedt, Bogusław Sonik, María Sornosa Martínez, Antonios Trakatellis, Evangelia Tzampazi, Thomas Ulmer, Marcello Vernola, Åsa Westlund
Substitute(s) present for the final vote	Alfonso Andria, María del Pilar Ayuso González, Bairbre de Brún, Jutta D. Haug, Miroslav Mikolášik, Andres Tarand, Claude Turmes
Substitute(s) under Rule 178(2) present for the final vote	
Comments (available in one language only)	...

22.3.2006

OPINION OF THE COMMITTEE ON TRANSPORT AND TOURISM

for the Committee on Industry, Research and Energy

on energy efficiency, or doing more with less
(2005/2210(INI))

Draftsman: Marta Vincenzi

SUGGESTIONS

The Committee on Industry, Research and Energy calls on the Committee on Transport and Tourism, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

since the objective of a 20% reduction in fossil fuel consumption (necessary both to ensure compliance with the Kyoto Protocol and to reduce our dependence on non-European countries) must be attained within the next 10 to 14 years and so solutions that can be put into effect immediately are required, though without our abandoning attempts to encourage the use of renewable energy sources to replace fossil fuels;

- Fixed facilities

1. Places greater emphasis on the close link that must be established between the objective set and a strategy of intervention aimed at maximising the efficiency of the energy production and conversion chain. This may also involve building on the framework already sketched out in Directive 2004/8/EC on the promotion of cogeneration in the internal energy market and supporting, and making obligatory, cogeneration (combined heat and power generation) for facilities above a certain size.

- Energy sources for transport

2. Stresses that the objective of energy efficiency requires, above all, an integrated approach to transport and mobility systems, the actual implementation of much of the legislation already adopted by Parliament, incentives to promote local public transport, reorganisation of the logistic infrastructure, and action to ensure freight transport is switched from road to rail and sea; takes the view, therefore, that attaining energy efficiency should be one of the guiding principles for the discussion now taking place for the purpose of revising the White Paper on European transport policy (COM(2001)0370).

3. Notes that advanced new aircraft already consume significantly less fuel, but nevertheless urges that research in this field be speeded up.
4. Calls on the Commission to submit an action plan based on a coherent, effective approach and objectives open to assessment, encompassing all EU policies with a view to encouraging both the use of biofuels (bio-ethanol and bio-diesel) and the introduction of hydrogen and hybrid vehicle technology.
5. In the case of road traffic, considers that it is necessary:
 - (a) to reduce CO₂ emissions in the medium term more drastically than proposed in the Green Paper (for example, to attain a maximum threshold between 100 and 80 g/km CO₂ by 2020), in keeping with the declarations of intent made by the Environment Council as long ago as June 1996 to the effect that 2010 was to be considered the deadline for achieving a maximum average emission limit of 120 g/km CO₂,
 - (b) to increase energy efficiency indirectly by means of the Galileo, SESAR, and ERTMS systems and promote those systems as a matter of priority in the sphere of research and development;
 - (c) to disseminate existing technical solutions and innovative technologies capable of producing energy savings if applied on a wide scale and used according to an integrated approach, especially as regards reducing the proportion accounted for by cars in rising fuel consumption;
 - (d) to provide incentives, including tax incentives, to promote hybrid cars, which are already available on the market today and would lead to an immediate saving in oil products;
 - (e) alongside the 'polluter pays' principle, to enforce the 'consumer pays' rule, following the model already adopted for the environment, under the amended Directive 1999/62/EC regarding charges to be levied for heavy vehicles, and now being put forward in the tax field in the proposal for a directive (COM(2005)0261) on passenger car-related taxes and devising a system of appropriate incentives not just for vehicles better in terms of their environmental impact, but also for those which consume less energy;
6. Consequently, encourages the Commission to implement a horizontal energy efficiency policy by coordinating the necessary targeted measures and to define, after carrying out an appropriate study, and examining the best existing practice, what levers (education campaigns, fiscal or other incentives and/or disincentives) and (legislative, technical or economic) instruments could be applied by the public authorities to achieve the stated objectives.
7. Urges the Commission to treat transport as a focus of special attention and a priority task for the network of local energy efficiency agencies.

PROCEDURE

Title	Energy efficiency, or doing more with less
References	2005/2210(INI)
Committee responsible	ITRE
Opinion by Date announced in plenary	TRAN 17.11.2005
Enhanced cooperation – date announced in plenary	
Draftswoman Date appointed	Marta Vincenzi 30.8.2005
Previous draftswoman	
Discussed in committee	24.1.2006 21.3.2006
Date adopted	21.3.2006
Result of final vote	+: 21 -: 15 0: 2
Members present for the final vote	Inés Ayala Sender, Etelka Barsi-Pataky, Philip Bradbourn, Paolo Costa, Michael Cramer, Arūnas Degutis, Petr Duchoň, Emanuel Jardim Fernandes, Roland Gewalt, Mathieu Grosch, Ewa Hedkvist Petersen, Jeanine Hennis-Plasschaert, Stanisław Jałowiecki, Georg Jarzembowski, Jaromír Kohlíček, Rodi Kratsa-Tsagaropoulou, Jörg Leichtfried, Fernand Le Rachinel, Bogusław Liberadzki, Michael Henry Nattrass, Seán Ó Neachtain, Willi Piecyk, Luís Queiró, Reinhard Rack, Ulrich Stockmann, Georgios Toussas, Marta Vincenzi, Corien Wortmann-Kool
Substitute(s) present for the final vote	Zsolt László Becsey, Guy Bono, Nathalie Griesbeck, Zita Gurmai, Anne E. Jensen, Jelko Kacin, Ioannis Kasoulides, Sepp Kusstatscher, Francesco Musotto, Luis Yañez-Barnuevo García
Substitute(s) under Rule 178(2) present for the final vote	
Comments (available in one language only)	...

PROCEDURE

Title	Energy efficiency or doing more with less - Green Paper				
Procedure number	2005/2210(INI)				
Committee responsible Date authorisation announced in plenary	ITRE 17.11.2005				
Committee(s) asked for opinion(s) Date announced in plenary	DEVE	INTA	ECON	ENVI	IMCO
	17.11.2005	17.11.2005	17.11.2005	17.11.2005	17.11.2005
	TRAN	REGI			
	17.11.2005	17.11.2005			
Not delivering opinion(s) Date of decision	DEVE	INTA	IMCO	REGI	
	25.1.2006	23.11.2005	21.3.2006	21.11.2005	
Enhanced cooperation Date announced in plenary					
Rapporteur(s) Date appointed	Alejo Vidal-Quadras Roca 14.7.2005				
Previous rapporteur(s)					
Discussed in committee	29.11.2005	26.1.2006	20.3.2006	18.4.2005	
Date adopted	25.4.2006				
Result of final vote	+ 35 - 2 0 2				
Members present for the final vote	Jan Březina, Philippe Busquin, Jerzy Buzek, Pilar del Castillo Vera, Jorgo Chatzimarkakis, Giles Chichester, Den Dover, Lena Ek, Adam Gierek, Norbert Glante, Fiona Hall, David Hammerstein Mintz, Erna Hennicot-Schoepges, Ján Hudacký, Romana Jordan Cizelj, Werner Langen, Anne Laperrouze, Pia Elda Locatelli, Angelika Niebler, Reino Paasilinna, Miloslav Ransdorf, Herbert Reul, Teresa Riera Madurell, Mechtild Rothe, Paul Rübig, Andres Tarand, Britta Thomsen, Catherine Trautmann, Claude Turmes, Alejo Vidal-Quadras Roca				
Substitute(s) present for the final vote	Etelka Barsi-Pataky, Daniel Caspary, Zdzisław Kazimierz Chmielewski, Edit Herczog, Erika Mann, Lambert van Nistelrooij, Bernhard Rapkay, Alyn Smith				
Substitute(s) under Rule 178(2) present for the final vote	Carmen Fraga Estévez				
Date tabled	3.5.2006				
Comments (available in one language only)					